

## A NEW GENUS OF DOLICHOPODIDAE (DIPTERA) FROM AUSTRALIA.

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Among some Acalyprate-flies collected on the sea shore near Southport, Queensland, I have found a female specimen of a wonderful Dolichopodid, which looks very like (the metallic colour not considered) a species of *Coelopa* or of some other Phycodromid-fly. It belongs certainly to the subfamily *Hydrophorinae*, and seems to be allied to the recently erected genus *Anahydrophorus* (a), the type of which, curiously enough, was described by Fabricius in 1805, as a species of *Scatophaga*, likewise a genus of Acalyprate-flies. But it is distinguished from it, as well from all the other known genera, by the very different and unique form of the antennae.

In the recent work of Becker on the *Dolichopodidae* of the Indo-Australian Region (b), the true Australian Fauna is very poorly represented; some species described by old writers have been omitted and the paper of White on Tasmanian forms (c) has not been considered. But the new genus here described has nothing to do with both the genera erected by White (*Archuomyia* and *Liparomyia*); some likeness seems instead to be present with *Hydrophorus cupreus* Macquart (d) from Tasmania, the type of which is described, however, without the antennae.

Mr. Hardy in Proc. Linn. Soc. N.S.W., xlv., 1921, p. 300, is of the opinion that *Hydrophorus cupreus* of Macquart must be placed in the gen. *Archuomyia*.

The genus *Ostenia* Hutton (e) from New Zealand is evidently allied, but has very different antennae; likewise the genus *Phalacrosona* Becker (f) from India and Formosa; even more different are the genera *Cymatopsis* Kertész (g) from New Guinea, and *Aphrosylopsis* Lamb (h) from the Bounty Islands.

I will call the new genus *Paraliptus* (from the Greek = overlooked), and I will describe it as follows:—

## PARALIPTUS, gen. nov. DOLICHOPODIDAE, HYDROPHORINAE.

Elongate, rather bare, much flattened, metallic species with very peculiar antennae and with predatory front legs.

Head (fig. A.B.) rather small, as broad as the thorax; in front view it is distinctly higher than broad; in lateral view it is produced below, being above at the same level with the back of mesonotum. Occiput rather concave in the

(a) Becker, Nova Acta, Abh. d. k. Scop.-Carol. Deutschen Akad. d. Naturf., Halle, 1917, vol. cii., n. 2, p. 298.

(b) Capita Zoologica, Verhandl. op. syst.-zool. Gsb. 'sGravenhage, 1922, Deel I. Afl. 4, 247 pp., xix. pl.

(c) Roy. Soc. of Tasmania: Papers and Proc., Hobart, 1916, p. 246-253.

(d) Mem. Soc. Sci. Lille (1849) 1850, p. 427, pl. xii, fig. 2, and Dipt. Exot., Suppl. iv., p. 123, Paris, 1849.

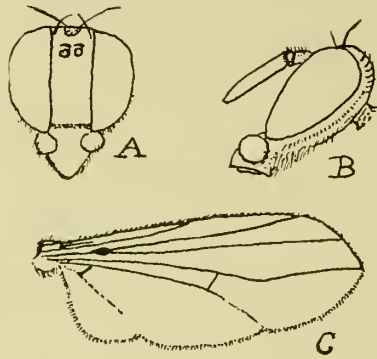
(e) Trans. N.Z. Inst., Wellington, 1900, p. 34.

(f) Capita Zoologica, 'sGravenhage, 1922, p. 44.

(g) Termesz. Füzet., Budapest, 1901, xxi vi., p. 408.

(h) Subart. Islands of N.Z., Wellington, 1909, vii., p. 132.

middle above the neck, a little swollen at sides below, and there clothed with numerous soft hairs; an irregular row of 6-7 strong but short bristles at upper border on each side; a pair of stout postvertical bristles. Frons flat, not at all prominent, parallel-sided, nearly subquadrate, gradually passing to the occiput at vertex; it is bare, bearing only one pair of strong orbital bristles near the vertex; directed inwardly; the ocellar tubercle is broad, flat, circular, bare, with one pair of bristles, which are widely separated and directed outwardly. Eyes proportionately small, oval, narrowed below, their vertical diameter being twice longer than the horizontal one; they are densely clothed by rather long, white pubescence. Face as broad as the frons, with the bisection line placed a little above the lower corner of the eyes; the upper part is flat, bare, not at all prominent in profile; the lower part is distinctly convex, a little shorter than the upper one and apparently bare, of triangular shape, being narrowed below; in profile it is pro-



A. Head in front view.  
B. Head lateral view.  
C. Wing. All the figures much enlarged.

duced below the eyes for a length a little greater than one-third of the vertical diameter of the eyes. Antennae inserted distinctly above the middle of the eyes; they are carried pendulous and are shorter than the face, but extending beyond the bisection line; they are close together at base and have two distinct tubercles above their root; the first joint is hairy above and is more than twice as long as the second, which is ring-like; third joint elongate,  $2\frac{1}{2}$  times longer than the two first joints together, gradually attenuated towards the end, without distinct arista or style. Palpi broad and flat, nearly circular, placed at sides of the lower part of the face, just below the eyes. Proboscis short and thick, simple, hardly prominent beyond the mouth-opening, which is narrow and rounded, the lower part of head being forwardly prolonged obliquely.

Thorax flat, elongate, parallel-sided, twice as long as broad; it bears two regular rows of short but stout aerostichal bristles, which are not extended to the scutellum; the dorsocentral bristles are placed on two rows on each side, and are likewise short and rather stout, extending from in front to the scutellum; the sides of back show some bristly hairs; of strong macrochaetae there are one humeral, two notopleural in front of the suture and very close together, one posterior supraalar. The pleurae are bare and without macrochaetae; only the sternopleura is hairy below. The transverse suture is less distinct, and visible only at

sides; the sides of back, at middle distance between acrostichal and notopleural lines, are elevated to form a longitudinal keel, which is sharper and more prominent above the root of wings. Scutellum flat, bare, margined, very small, being only one-seventh of the length of back; it bears one strong bristle at each side near the base. Calypters small; halteres short, but with a great knob. Mesopleuragm reduced to form a small horizontal plate just beyond the scutellum, resembling a first abdominal segment.

Abdomen not abbreviated, as long as thorax and head taken together; it is flat, parallel-sided, as broad as the thorax, consisting of five visible segments, which are all of about the same length; the tergites are bent downwards at sides, covering in part the sternites; there are a few hairs, but no bristles.

Legs rather short and stout. Those of the front pair are predatory; coxae elongate and thickened, without bristles, never spinulose; femora greatly thickened, armed below on inner side with a row of strong spines; tibiae shorter than their femora; tarsi as long as the tibiae, distinctly dilated at end. Middle legs thinner than all the others; coxae small; femora simple, not bristly, distinctly curved; tibiae with 3 rows of scattered bristles, shorter than the femora and as long as the tarsi; last tarsal joint dilated. Hind legs elongate; coxae short, without bristles; femora simple, but more thickened than the middle ones and likewise curved; tibiae longer than the femora, with long bristles and with rather abundant hairs; tarsi distinctly shorter than the tibiae, with the praetarsi about as long as the four following joints together, and devoid of bristles above; last joint less dilated. All the tarsi are broad and flattened; pulvilli very broad and rounded; claws thin, curved, not longer than the pulvilli.

Wings (fig. C.) parallel-sided, rounded at end, shorter than the body, with the lower half much developed. First vein ending a little before middle of wing. Second vein straight, ending nearer to the end of the third than to that of the second. Third vein straight, with distinct basal swelling. Fourth vein broadly curved beyond the hind cross-vein, but straight on its last portion and parallel with the last portion of third. Discoidal cell very narrow, its terminal cross-vein being placed about the middle of the wing; this cross-vein is therefore very short and distant from the hind border, being about one-third of the last portion of fifth vein, which is rather thin. Sixth vein not reaching the hind border, weakly chitinated. The costa ends at end of fourth vein, which is precisely at wing-tip. Axillary lobe broad and rounded; alula very small. Costae thickened and curved at extreme base; subcosta very thin, free at end.

*Type:* The following new species:—

*Paralipatus mirabilis*, sp. nov. A flat, elongate, parallel-sided, metallic fly with reddish antennae and legs and whitish wings.

Type ♀, a single specimen in the Health Department, Sydney, from Southport, Queensland, 7th January, 1923.

♀. Length of body, 5.5 mm.; of a wing, 4.5 mm.

Head metallic green; occiput with faint grey dust above, but densely white dusted below, the whole lower part of head being non-metallic. Frons shining, with whitish dust near the eyes and above the supra-antennal tubercles, near the vertex with cupreous reflections; ocellar tubercle green. Face densely grey dusted, the ground colour not visible. Antennae entirely reddish, whitish dusted, the hairs of the basal joints black. Palpi black, but densely grey dusted; proboscis black. All the bristles black; the hairs are whitish; postocular border white dusted with short and thin white cilia.

Thorax shining green, with cupreous reflections at sides; on the back the grey dust is disposed in three stripes, one acrostichal and two dorsocentral, but these stripes do not reach posteriorly the scutellum; moreover, on the sides, above

the notopleural line, there is a grey stripe from the humeri to the suture. The pleurae are not metallic, being densely clothed with opacous grey dust; the hairs of breast are pale yellowish. Scutellum green, but less shining because of the strong punctuation. All the bristles black. Mesophragma black, grey dusted. Calypters and halteres pale yellowish or whitish.

Abdomen metallic green, more shining than the back of mesonotum, not being punctate, broadly cupreous at sides and behind; each segment has a white shining hind border, narrowly interrupted in the middle and dilated at sides, more developed on the middle segments. Hairs whitish, those of the end darkened. Venter metallic green, whitish dusted.

All the coxae black, grey dusted and whitish pilose, but they are more or less reddish on the posterior side like the trochanters. All the femora reddish, but more or less broadly darkened on the outer side; the hairs are whitish, but they are darkened on the blackish parts. Tibiae entirely reddish-yellow, with dark pubescence and black bristles; tarsi yellowish, with black pubescence and with the terminal joint black at end; pulvilli dark; claws black.

Wings whitish-hyaline, with a faint but distinct yellowish tint along the fore border to third vein. Costae and veins yellowish, a little darkened in their terminal portions.

Note: The unique specimen of *P. mirabilis* was collected by Mr. L. Wassell, it was not taken on the beach, though probably captured in the vicinity of water.

The types of the new species described in Professor Bezzi's papers will be placed in the Australian Museum, Sydney.

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